

06/30/99
JCS
U.S. PTO



PATENT

Attorney Docket No. 0236.0006

Box Patent Application
Commissioner of Patents and Trademarks
Washington, D.C. 20231

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NEW APPLICATION TRANSMITTAL

Transmitted herewith for filing is the patent application of
Inventor(s):

David A. Martin

WARNING: Patent must be applied for in the name(s) of all of the actual inventor(s). 37
CFR 1.41(a) and 1.53(b).

For (title): **METHOD AND DEVICE FOR PREVENTING CHECK FRAUD**

1. Type of Application

This new application is for a(n) (check one applicable item below):

Original

Design

Plant

WARNING: Do not use this transmittal for a completion in the U.S. of an International
Application under 35 U.S.C. 371(c)(4) unless the International Application is being filed as a
divisional, continuation or continuation-in-part application.

NOTE: If one of the following 3 items apply then complete and attach ADDED PAGES FOR
NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF A PRIOR U.S.
APPLICATION CLAIMED.

Divisional

Continuation

Continuation-in-part (CIP)

CERTIFICATION UNDER 37 CFR 1.10

I hereby certify that this New Application Transmittal and the documents referred to as enclosed therein are being deposited with the United States Postal Service on this date
6-30-99 in an envelope as "Express Mail Post Office to Addressee" Mailing Label Number EL 287032279 US addressed to the: Commissioner of Patents and Trademarks, Washington, D.C. 20231.

Lynn M. Gorbach

(Type or print name of person mailing paper)

Lynn M. Gorbach

(Signature of person mailing paper)

NOTE: Each paper or fee referred to as enclosed herein has the number of the "Express Mail" mailing label placed thereon prior to mailing. 37 CFR 1.10(b).

2. Benefit of Prior U.S. Application(s) (35 USC 120)

NOTE: If the new application being transmitted is a divisional, continuation or a continuation-in-part of a parent case, or where the parent case is an International Application which designated the U.S., then check the following item and complete and attach ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF PRIOR U.S. APPLICATION(S) CLAIMED.

The new application being transmitted claims the benefit of prior U.S. application(s) and enclosed are ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF PRIOR U.S. APPLICATION(S) CLAIMED.

3. Papers Enclosed Which Are Required For Filing Date Under 37 CFR 1.53(b) (Regular)

or 37 CFR 1.153 (Design) Application

18 Pages of specification

7 Pages of claims

1 Pages of Abstract

1 Sheets of drawing

 ____ formal

 ____ X informal

WARNING: DO NOT submit original drawings. A high quality copy of the drawings should be supplied when filing a patent application. The drawings that are submitted to the Office must be on strong, white, smooth, and non-shiny paper and meet the standards according to §1.84. If corrections to the drawings are necessary, they should be made to the original drawing and a high-quality copy of the corrected original drawing then submitted to the Office.

Only one copy is required or desired. Comments on proposed new 37 CFR 1.84, Notice of March 9, 1988 (1990 O.G. 57-62).

NOTE: "Identifying indicia such as the serial number, group and unit, title of the invention, attorney's docket number, inventor's name, number of sheets, etc., not to exceed 2 3/4 inches (7.0 cm.) in width may be placed in a centered location between the side edges within three fourths inch (19.1 mm.) of the top edge. Either this marking technique on the front of the drawing or the placement, although not preferred, of this information and the title of the invention on the back of the drawings is acceptable." Proposed 37 CFR 1.84(1). Notice of March 9, 1988 (1090 O.G. 57-62).

4. Additional papers enclosed

 Preliminary Amendment

 Information Disclosure Statement

 Form PTO-1449

Citations

Declaration of Biological Deposit

Submission of "Sequence Listing", computer readable copy and/or amendment pertaining thereto for biotechnology invention containing nucleotide and/or amino acid sequence.

Authorization of Attorney(s) to Accept and Follow instructions from Representative

Special Comments

Other

5. Declaration or oath

Enclosed
executed by (check all applicable boxes)

inventor(s)

legal representative of inventor(s). 37 CFR 1.42 or 1.43

joint inventor or person showing a proprietary interest on behalf of inventor who refused to sign or cannot be reached.

this is the petition required by 37 CFR 1.47 and the statement required by 37 CFR 1.47 is also attached. See item 13 below for fee.

Not Enclosed.

WARNING: Where the filing is a completion in the U.S. of an International Application but where a declaration is not available or where the completion of the U.S. application contains subject matter in addition to the International Application the application may be treated as a continuation or continuation-in-part, as the case may be, utilizing ADDED PAGE FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF PRIOR U.S. APPLICATION CLAIMED.

Application is made by a person authorized under 37 CFR 1.41 on behalf of all the above named inventor(s). The declaration or oath, along with the surcharge required by 37 CFR 1.16(e) can be filed subsequently.

NOTE: It is important that all the correct inventor(s) are named for filing under 37 CFR 1.418

and 1.53(b).

Showing that the filing is authorized. (Not required unless called into question. 37 CFR 1.41(d)).

6. Inventorship Statement

WARNING: If the named inventors are each not the inventors of all the claims an explanation, including the ownership of the various claims at the time the last claimed invention was made, should be submitted.

The inventorship for all the claims in this application are:

The same

or

Are not the same. An explanation, including the ownership of the various claims at the time the last claimed invention was made,

is submitted.

will be submitted.

7. Language

NOTE: An application including a signed oath or declaration may be filed in a language other than English. A verified English translation of the non-English language application and the processing fee of \$30.00 required by 3 CFR 1.17(k) is required to be filed with the application or within such time as may be set by the Office. 37 CFR 1.52(d).

NOTE: A non-English oath or declaration in the form provided or approved by the PTO need not be translated. 37 CFR 1.69(b).

English

non-English

the attached translation is a verified translation. 37 CFR 1.52(d).

8. Assignment

An assignment of the invention to _____

_____ is attached.

— will follow.

NOTE: "If an assignment is submitted with a new application, send two separate letters-one for the application and one for the assignment." Notice of May 4, 1990 (1114 O.G. 77-78).

9. Certified Copy

Certified copy(ies) of application(s)

(appln. no.) (filed) (country)

(appln. no.) (filed) (country)

(appln. no.) (filed) (country)

_____ is (are) attached. A separate "ASSIGNMENT COVER LETTER ACCOMPANYING NEW PATENT APPLICATION" is also attached.

— will follow.

NOTE: The foreign application forming the basis for the claim for priority must be referred to in the oath or declaration. 37 CFR 1.55(a) and 1.63.

NOTE: This item is for any foreign priority for which the application being filed directly relates. If any parent U.S. application or International Application from which this application claims benefit under 35 U.S.C. 120 is itself entitled to priority from a prior foreign application then complete item 18 on the ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF PRIOR U.S. APPLICATION(S) CLAIMED.

10. Fee Calculation (37 CFR 1.16)

A. X Regular application

CLAIMS AS FILED

Number filed	Number Extra	Rate	Basic Fee
			\$760.00
<hr/>			
Total			
Claims 37 CFR 1.168 23-20=	3	X \$18.00	\$54.00
<hr/>			
Independent			
Claims (37 CFR 1.16(b)) 6-3=	3	X \$78.00	\$234.00
<hr/>			
Multiple dependent claim(s), if any			
(37 CFR 1.16(d))		\$260.00	\$ 0.00
<hr/>			

Amendment canceling extra claims enclosed.

Amendment deleting multiple-dependencies enclosed.

Fee for extra claims is not being paid at this time.

NOTE: If the fees for extra claims are not paid on filing they must be paid or the claims canceled by amendment, prior to the expiration of the time period set for response by the Patent and Trademark Office in any notice of fee deficiency. 37 CFR 1.16(d).

B. Design application

(\$330.00--37 CFR 1.16(f))

Filing Fee Calculation \$ _____

C. Plant application

(\$540.00--37 CFR 1.16(g))

Filing Fee Calculation \$ _____

11. Small Entity Statement(s)

Verified Statement(s) that this is a filing by a small entity under 37 CFR 1.9 and 1.27 is(are) attached.

Filing Fee Calculation (50% of A,B or C above) \$ 524.00

NOTE: Any excess of the full fee paid will be refunded if a verified statement and a refund request are filed within 2 months of the date of timely payment of a full fee. 37 CFR 1.28(a).

12. Request for International-Type Search (37 CFR 1.104(d) (complete, if applicable)

Please prepare an international-type search report for this application at the time when national examination on the merits takes place.

13. Fee Payment Being Made At This Time

Not Enclosed

No filing fee is to be paid at this time. (This and the surcharge required by 37 CFR 1.16(e) can be paid subsequently).

Enclosed

basic filing fee \$ 524.00

recording assignment \$ _____

(\$8.00; 37 CFR 1.21(h))

petition fee for filing by other than all the inventors or person on behalf of the inventor where inventor refused to sign or cannot be reached. (\$120.00; 37 CFR 1.47 and 1.17(h)) \$ _____

for processing an application with a specification in a non-English language. (\$30.00; 37 CFR 1.52(d) and 1.17(k)) \$ _____

processing and retention fee (\$120.00; 37 CFR 1.53(d) and 1.21(l)) \$ _____

fee for international-type search report (\$30.00; 37 CFR 1.21(e)). \$ _____

NOTE: 37 CFR 1.21(l) establishes a fee for processing and retaining any application which is abandoned for failing to complete the application pursuant to 37 CFR 1.53(d) and this, as well

as the changes to 37 CFR 1.53 and 1.78, indicate that in order to obtain the benefit of a prior U.S. application, either the basic filing fee must be paid or the processing and retention fee of § 1.21(l) must be paid within 1 year from notification under § 53(d).

Total fees enclosed \$ 524.00

14. Method of Payment of Fees

Check in the amount of \$ 524.00

Charge Account No. _____ in the amount of \$ _____.
A duplicate of this transmittal is attached.

NOTE: Fees should be itemized in such a manner that it is clear for which purpose the fees are paid. 37 CFR 1.22(b).

15. Authorization to Charge Additional Fees

WARNING: If no fees are to be paid on filing the following items should not be completed.

WARNING: Accurately count claims, especially multiple dependent claims, to avoid unexpected high charges, if extra claim charges are authorized.

The Commissioner is hereby authorized to charge the following additional fees by this paper and during the entire pendency of this application to Account No. 05-0875.

37 CFR 1.16(a), (f) or (g) (filing fees)

37 CFR 1.16(b), 8 and (d) (presentation of extra claims)

NOTE: Because additional fees for excess or multiple dependent claims not paid on filing or on later presentation must only be paid for these claims canceled by amendment prior to the expiration of the time period set for response by the PTO in any notice of fee deficiency (37 CFR 1.16(d)), it might be best not to authorize the PTO to charge additional claim fees, except possibly when dealing with amendments after final action.

37 CFR 1.16(e) (surcharge for filing the basic filing fee and/or declaration on a date later than the filing date of the application)

37 CFR 1.17 (application processing fees)

WARNING: While 37 CFR 1.17(a), (b), (c), and (d) deal with extensions of time under §1.136(a) this authorization should be made only with the knowledge that: "Submission of the appropriate extension fee under 37 C.F.R. 1.136(a) is to no avail unless a request or petition for extension is filed." (Emphasis added). Notice of November 5, 1985 (1060 O.G. 27).

37 CFR 1.18 (issue fee at or before mailing of Notice of Allowance, pursuant to 37 CFR 1.311(b))

NOTE: Where an authorization to charge the issue fee to a deposit account has been filed before the mailing of a Notice of Allowance, the issue fee will be automatically charged to the deposit account at the time of mailing the notice of allowance. 37 CFR 1.311(b).

NOTE: 37 CFR 1.28(b) requires "Notification of any change in loss of entitlement to small entity status must be filed in the application... prior to paying, or at the time of paying...issue fee." From the wording of 37 CFR 1.28(b): (a) notification of change of status must be made even if the fee is paid as "other than a small entity" and (b) no notification is required if the change is to another small entity.

16. Instructions As To Overpayment

credit Account No. _____

refund

Reg. No. 43,189



SIGNATURE OF ATTORNEY

Tel. No. (330) 535-9999

Daniel A. Thomson
4421 Ranchwood Spur
Akron, OH 44333-1343

Incorporation by reference of added pages

Check the following item if the application in this transmittal claims the benefit of prior U.S. application(s) (including an international application entering the U.S. stage as a

continuation, divisional or C-I-P application) and complete and attach the ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF PRIOR U.S. APPLICATION(S) CLAIMED

Plus Added Pages For New Application Transmittal Where Benefit Of Prior U.S. Application(s) Claimed

Number of pages added _____

Plus Added Pages For Papers Referred To In item 4 above

Number of pages added _____

Plus "Assignment Cover Letter Accompanying New Application"

Number of pages added _____

Statement Where No Further Pages Added

(If no further pages form a part of this Transmittal then end this Transmittal with this page and check the following item)

X This transmittal ends with this page.

PATENT

Attorney's Docket No.: 0236.0006

Applicant or Patentee: David A. Martin

Serial or Patent No.: UNKNOWN

Filed or Issued: HEREWITH

For: **METHOD AND DEVICE FOR PREVENTING CHECK FRAUD****VERIFIED STATEMENT (DECLARATION) CLAIMING SMALL ENTITY STATUS
(37 CFR 1.9(f) and 1.27(b))-INDEPENDENT INVENTOR**

As a below named inventor, I hereby declare that I qualify as an independent inventor as defined in 37 CFR 1.9(c) for purposes of paying reduced fees under Section 41 (a) and (b) of Title 35, United States Code, to the Patent and Trademark Office with regard to the invention entitled: **METHOD AND DEVICE FOR PREVENTING CHECK FRAUD**

described in

the specification filed herewith.

application serial no. 0 / _____, filed _____.

patent no. _____, issued _____.

I have not assigned, granted, conveyed or licensed and am under no obligation under contract or law to assign, grant, convey or license, any rights in the invention to any person who could not be classified as an independent inventor under 37 CFR 1.9(c) if that person had made the invention, or to any concern which would not qualify as a small business concern under 37 CFR 1.9(d) or a nonprofit organization under 37 CFR 1.9(e).

Each person, concern or organization to which I have assigned, granted, conveyed, or licensed or am under an obligation under contract or law to assign, grant, convey, or license any rights in the invention is listed below:

no such person, concern, or organization

persons, concerns or organizations listed below*

***NOTE:** Separate verified statements are required from each named person, concern or organization having rights to the invention averring to their status as small entities. (37 CFR 1.27).

FULL NAME: David A. Martin

ADDRESS: 35521 Quartermore Circle, Bentleyville, OH 44139

INDIVIDUAL SMALL BUSINESS CONCERN NONPROFIT
ORGANIZATION

I acknowledge the duty to file, in this application or patent, notification of any change in status resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the earliest of the issue fee or any maintenance fee due after the date on which status as a small entity is no longer appropriate. (37 CFR 1.28(b)).

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application, any patent issuing thereon, or any patent to which this verified statement is directed.

David A. Martin
Name of inventor

David G. Martin
signature of inventor

Date 06-29-99

METHOD AND DEVICE FOR PREVENTING CHECK FRAUD

BACKGROUND OF THE INVENTION

5

1. Field of Invention

This invention pertains to the art of devices and methods for preventing check fraud, and more particularly to an integrated fraud-preventing process between the customer and the bank.

10

2. Description of the Related Art

It is well known that check fraud is one of the largest challenges facing financial institutions today. Technology has made it increasingly simple for 15 criminals, either independently or in organized gangs, to create increasingly realistic counterfeit checks and false identification that can be used to defraud banks. A 1994 survey by the American Bankers Association found that 54% of community banks, 94% of mid-sized banks, and 88% of large banks sustained losses from check fraud in 1993. Between 1991 and 1993, the number of 20 fraudulent checks submitted increased 136%, from 537,000 to 1,267,000. Over the same period, annual losses from those frauds increased to reach \$815,000,000.

Thrifts, savings banks, and other financial institutions, retail merchants, government agencies, and large corporations, are also victims of check fraud. A 25 recent survey of more than 2,000 large US corporations concluded that on average, they lost approximately \$360,000 a year to check fraud. The FBI estimates that if commercial banks and other institutions combined their check fraud losses, the total would be \$12 billion to \$15 billion annually.

30

Several methods have been tried in order to curtail the problem of check

fraud in the banking industry. One of the ways that has been used is called positive pay. Positive pay allows a company and its bank to work together to detect check fraud by identifying items presented for payment that the company did not issue.

In the usual case, the company electronically transmits to the bank a list of all

- 5 checks that issued on a particular day. The bank verifies checks received for payment against that list and pays only those on the list. The bank rejects checks not on the company's list, checks that exceed a specific dollar amount, or checks that carry dates long past. The bank investigates rejected checks to find out if the items are fraudulent or in error. The bank only pays exception items approved by
- 10 the company.

Another related method of curtailing check fraud is reverse positive pay.

Reverse positive pay is similar to positive pay, but the process is reversed, with the company, not the bank, maintaining a list of checks issued. When checks are

- 15 presented for payment and clear through the Federal Reserve system, the Federal Reserve prepares a file of the check's account numbers, serial numbers, and dollar amounts, and sends the file to the bank. In reverse positive pay, the bank sends that file to the company, where the company compares the information to its internal records. The company lets the bank know which checks match its internal
- 20 information, and the bank pays those items. The bank then researches the checks that do not match, corrects any misreads or encoding errors, and determines if any items are fraudulent. The bank pays only "true exceptions", that is, those that can be reconciled with the company's files.

- 25 Another security measure that some banks have used, and seen a reduction in check fraud as result of, is fingerprinting non-customers that seek to cash checks. Generally, the programs require all persons presenting checks for payment who do not have an account with the bank to provide a thumbprint. A person who does not object to providing a fingerprint is asked to ink his or her thumb on a

small pad and place the imprint in the space between the memo line and the signature line of the check being presented. If the bank later finds out that the check was fraudulent or was altered it can provide the check, with the fingerprint, to law enforcement officials.

5

A final known security measure is adding security features to the checks themselves. Some of the useful security measures include the following: watermarks, copy void pantograph, chemical voids, high resolution microprinting, 3-dimensional reflective hollow strip and security inks. Each of these measures

- 10 1. will be briefly summarized. 1.) Watermarks are made by applying different degrees of pressure during the paper manufacturing process. Most watermarks make subtle designs on the front and back of the checks. These marks are not easily visible and can only be seen when they are held up to light at a 45° angle.
- 15 2.) Copy void pantographs are patented designs in the background pattern of checks. When photocopied, the pattern changes and the word "VOID" appears, making the copy non-negotiable. 3.) Chemical voids involve treating check paper in a manner that is not detectable until eradicator chemicals contact the paper. When chemicals are applied, the treatment causes the word "VOID" to appear, making the item non-negotiable. Checks treated with chemical voids cannot be
- 20 4.) High resolution microprinting is very small printing typically used for the signature line of a check or around the border in what appears to be a line or pattern to the naked eye. When magnified the line or pattern contains a series of words that run together or become totally illegible if the check has been photocopied or scanned with a desktop scanner. 5.) A 3-
- 25 6.) A 3-dimensional reflective hollow stripe is a metallic stripe that contains one or more holograms, similar to those in credit cards. These items are difficult to forge, scan, or reproduce because they are produced by a sophisticated, laser based etching process. 6.) Security inks react with common eradication chemicals. These inks reduce a forger's ability to modify the printed dollar amount or alter the

designated payee because when solvents are applied, a chemical reaction with the security ink distorts the appearance of the check. This makes such items very difficult to alter without detection.

- 5 Although these security measures have been somewhat effective in deterring check fraud, the problem still persists. The currently known security measures are generally fairly expensive, and usually only available to medium to large size businesses. The present invention allows for an easy and efficient method for verifying the validity of a check, and can be used by even the individual customer.
- 10 The present invention provides further security measures for verifying the validity of a check received by the banking system.

Another problem in the banking industry is the delay that occurs from the time a check is written until the time the check finally clears the bank and is paid to the payee. Currently, if the payee bank and the drawee bank are separate entities, the process could take several days. The current invention presents a method for integrating the entire process and making it instantaneous.

- 15

One known method for verifying and tracking checks is found in US Patent No. 5,594,226 to Steger. Steger provides an apparatus for automatically accessing and verifying checking account status based on information containing a barcode printed on a check, travelers check, or money order. This method deals with a point-of-sale check verification system, and not a method for clearing checks at a bank. The Steger patent is mainly a method for determining that a checking account has enough money to cover the check that is being presented. The present invention allows a check to be created with a barcode containing the payee, the amount of the check, and the date of the check, so that when the bank receives the check for presentment, it can verify the authenticity of the check.

- 20
- 25

Another known method for verifying checks is found in US Patent No. 5,903,881 to Schrader et al. Schrader provides a software product, computer implemented, method and system to integrate a user interface having three simultaneously displaced items of information. The interface displays the account 5 balance, and both clear and uncleared transactions. However, this invention does not have any way of preventing a fraudulent check from being cleared by the bank. The present invention allows the bank to check the authenticity of a check before it is cleared by the bank.

10 Difficulties inherent in the related art are therefore overcome in a way that is simple and efficient while providing better and more advantageous results.

Definition of Terms

15 To assist the reader in understanding the description of this invention, the definitions of the following terms should be noted.

Customer- A person with an account at the bank.

20 **Drawee**- A party, typically a bank, that is required to pay out the money when a check or draft is presented. The drawee is usually the payor bank.

Drawer- A person writing a check. The drawer is typically a customer of the drawee.

25

MICR- (Magnetic Ink Character Recognition)- Numbers at the bottom of a check, printed in magnetic ink, which can be read by machines. The numbers usually are encoded with the name and address of the drawee bank, the account

number, and the check number. The dollar amount is added to the MICR line during check processing.

5 **Payee**- A party entitled, by the creation of a draft or check, to receive funds from a drawee.

Presentment- The delivery of a check or draft to the drawee or the drawer for payment.

10 **Negotiable Instrument**- An unconditional promise or order to pay a fixed amount of money, with or without interest or other charges described in the promise or to order, if it 1) is payable to a bearer or to order at the time it is issued or first comes into possession of a holder, 2) is payable on demand or at a definite time, and 3) does not state any other undertaking or instruction by the person
15 promising or ordering payment to do any act in addition to the payment of money, but the promise or order may contain (i) an undertaking or power to give, maintain, or protect collateral to secure payments, (ii) an authorization or power to the holder to confess judgment or realize on or dispose of collateral, or (iii) a waiver of the benefit of any law intended for the advantage or protection of an
20 obligor.

Summary of the Invention

25 In accordance with one aspect of the current invention, a method for preventing check fraud includes the steps of providing a bank with a bank routing number, providing a customer having an account with the bank and a corresponding account number, having the customer electronically create a check containing at least, a payee, an amount, a date, a customer name, and a check

number, attaching a bar code on the check using electronic placement means wherein the bar code contains the customer's account number, the bank's routing number and at least one piece of information selected from the group consisting of, the payee, the amount, the date, the customer's name, and the check number,

- 5 delivering the check to the bank, scanning the bar code, and paying the check only if the information printed on the check is identical to the at least one piece of information on the bar code.

In accordance with still another aspect of the present invention, an

- 10 improved negotiable instrument includes an amount box containing an amount of the negotiable instrument, a signature line for providing the identity of a drawer, a payee identifier line, an amount line, a drawee account number, a drawee routing number, and a machine readable code, the machine readable code containing the drawer's account number, the drawee's routing number and one or more pieces of
- 15 information from the group consisting of the following: a payee, the amount of the negotiable instrument, a date corresponding to the date the negotiable instrument was created, the identity of the drawer, a memo, and a identifier number corresponding to the negotiable instrument.

- 20 In accordance with another aspect of the present invention, the improved negotiable instrument is a check and the machine readable code includes at least one of the following pieces of information: a payee, the amount of the negotiable instrument, the date the negotiable instrument was created, the identity of the drawer, a memo, the drawer's account number, the drawee's routing number, and
- 25 the identifier number of the negotiable instruments.

In accordance with still another aspect of the present invention, the improved negotiable instrument includes a machine-readable code, a date line, the

identifier number of a negotiable instrument, a name and address line of a drawer, and a memo line.

In accordance with yet another aspect of the current invention, the method

- 5 includes the steps of providing a drawee, providing a drawer having an account with the drawee and a corresponding account number, delivering to the drawee at least one negotiable instrument drawn to the drawer's account, putting the at least one negotiable instrument into an electronic format to be viewed on the Internet, viewing the at least one negotiable instrument on the Internet, having the drawer
- 10 advise the drawee which of the at least one negotiable instruments to pay, entering the information from the negotiable instrument into an electronic database, linking the electronic database with the drawer's account, transferring information from the electronic database to the Internet, determining if any of the at least one negotiable instruments were created by the drawer, electronically marking any of
- 15 the at least one negotiable instruments that were created by the drawer, and paying the at least one negotiable instrument that the drawer has advised the drawee to pay.

In accordance with another aspect of the current invention, the method

- 20 includes the steps of providing a drawer having an account with a corresponding account number, providing a drawee with a drawee routing number, providing means for creating a negotiable instrument, creating at least one negotiable instrument containing at least, a payee, a monetary amount, a date, and a drawee's identity, providing a machine readable code, attaching the machine readable code
- 25 on the at least one negotiable instrument, the machine readable code containing the drawer's account number, the drawee's routing number and at least one piece of information selected from the group comprising, the payee, the monetary amount, the date, the identity of the drawer, a memo, and a identifier number corresponding to the at least one negotiable instrument, receiving the at least one

negotiable instrument, scanning the machine readable code, determining whether information printed on the at least one negotiable instrument is identical to the at least one piece of information on the machine readable code, and paying the negotiable instrument only if the information on the machine-readable code is

5 identical to the at least one piece of information on the at least one negotiable instrument.

In accordance with still yet another aspect of the current invention, the device includes means for entering data, means for creating a negotiable instrument

10 containing at least, a payee, an amount, a date, and a drawer's identity, means for creating a machine readable code, the machine readable code containing the drawer's account number, the drawee's routing number and at least one piece of information selected from the group comprising, the payee, the amount, the date, the identity of the drawer, a memo, and a identifier number corresponding to the at

15 least one negotiable instrument, means for scanning the machine-readable code, means for scanning the information on the negotiable instrument, and means for comparing the information from the machine-readable code to the information on the negotiable instrument.

20 In accordance with another aspect of the present invention the method also includes transferring the information to the drawee, entering the information into a drawee database, automatically comparing the information on the at least one negotiable instrument to the information in the drawee database, and notifying the drawer if the information printed on the at least one negotiable instrument is not

25 identical to the at least one piece of information on the machine-readable code.

In accordance with still another aspect of the current invention, a method for integrating the creation and processing of negotiable instruments includes the steps of providing a drawer having an account with a corresponding account

number, providing a drawee with a drawee routing number, creating at least one negotiable instrument containing information that contains at least, a payee, an amount, a date, and a drawee's identity, providing a machine readable code, attaching the machine readable code on the at least one negotiable instrument, the

5 machine readable code containing the drawer's account number, the drawee's routing number and at least one piece of information selected from the group comprising, the payee, the amount, the date, the identity of the drawer, a memo, and a identifier number corresponding to the at least one negotiable instrument, transferring the information to the drawee bank, providing a payee, providing a

10 payee bank, presenting the at least one negotiable instrument to the payee, and having the payee scan the machine-readable code.

In accordance with yet another aspect of the current invention, the method further includes the steps of having the payee electronically transfer the drawer's

15 account number, the drawee's routing number, and the at least one piece of information to the payee bank, having the payee bank electronically transfer the drawer's account number, the drawee's routing number, and the at least one piece of information to the drawee bank, having the drawee bank determine whether the drawer's account number, the drawee's routing number, and the at least one piece

20 of information supplied by the payee bank are identical to the information transferred to the drawee bank, and having the drawee bank pay the at least one negotiable instrument only if the drawer's account number, the drawee's routing number, and the at least one piece of information supplied by the payee bank are identical to the information transferred to the drawee bank.

25

In accordance with another aspect of the current invention, the method further includes the steps of providing an integrated system, wherein the drawee and the drawer's creation of the at least one negotiable instrument are linked, whereby when the at least one negotiable instrument is created, the information is

stored in a drawee database, providing means for the drawer to view the drawer's account, and having the drawee bank automatically update the drawer's account to reflect payment of the at least one negotiable instrument, thereby creating an up to date amount in the drawer's account.

5

One advantage of the present invention is that the bank and the customer can have greater confidence that the checks that are paid from the customer's account are accurate.

10 Another advantage of the present invention is that a more secured method for protecting against check fraud is provided.

Yet another advantage of the current invention is that a bank can quickly and efficiently determine which of the customer's checks are authentic.

15

Still another advantage of the current invention is that the entire process of writing, clearing, and paying checks is integrated, automated, and expedited.

20 Another advantage of the present invention is that the payment of the check and the balancing of the checking account are automated, expedited, and integrated.

25 Still other benefits and advantages of the invention will become apparent to those skilled in the art to which it pertains upon a reading and understanding of the following detailed specification.

Brief Description of the Drawings

The invention may take physical form in certain parts and arrangement of parts, a preferred embodiment of which will be described in detail in the specification and illustrated in the accompanying drawing which forms a part hereof and wherein:

5

FIGURE 1 – is a plan view of the inventive check showing a barcode, a routing number, an account number, a check number, a date line, an amount box, a signature line, a payee identifier line, and a memo line.

10

Description of the Preferred Embodiment

With reference now to FIGURE 1, an inventive check 10, for aiding in the prevention of check fraud, includes a barcode 12, a routing number 14, an account number 16, a check number 18, a signature line 26, a payee identifier line 28, a date line 20, an amount box 22, and a memo line 24. In a preferred embodiment, the bar code 12 is placed on the check 10 after the check 10 has been written by the customer. The barcode 12 includes the amount of the check, the date the check was written, the account number, the bank's routing number, and the payee of the check. The present invention encompasses using any one, or any combination, of these elements. However, in the preferred embodiment, all of the elements are included in the barcode 12. The bar code 12 is a standard bar code (e.g., UPC, EAN, JAN, or UPC 128), which is readable by a variety of bar code reading devices. The check 10 and the bar code 12 are only intended to be preferred embodiments of the invention. Any negotiable instrument or machine readable code may be used in the place of the check 10 and the bar code 12, respectively.

In the preferred embodiment, the customer writes a check 10, by entering the necessary information into a software program. The customer enters the information required, in the software fields, for the check 10. The software

program then generates, electronically, a check 10 containing all the information entered by the customer. Once the check 10 has been created, the information from the check 10, including the payee, the amount of the check 10, the date of the check 10, the check number, the account number, and the drawee bank's routing 5 number are electronically transferred to the drawee bank. The transfer of the information to the drawee bank preferably takes place over a secured line modem, but any means of transferring, electronically or otherwise, the information can be used, as long as chosen using sound engineering judgment. When the drawee bank receives the information, the information is downloaded into the drawee bank's 10 system in preparation for the presentment of the check 10.

The software program is linked to an apparatus that can print the check 10 as well as a barcode 12 on the check 10. The invention also encompasses the bar code 12 being printed on an adhesive sticker and applied to one of several locations 15 on the check 10. If the adhesive sticker bar code 12 is used, then the check 10 does not need to be generated by a software program. As long as the bar code 12 is generated by the software program, the bar code 12 can be applied to a regular, blank check 10.

20 Once the information is entered into the software program by the customer, the printer will print the check 10 with the barcode 12 on the check 10. The barcode 12 will include some or all of the following: the payee of the check, the amount of the check, date the check was written, the drawer's account number, the drawee's routing number, and the identifier number of the check 10. The operation 25 of the printer, and application of the barcode 12 to the check 10, is well known in the art and, for the sake of brevity, will not be described herein.

The check 10 is then sent to the payee. When the payee presents the check 10 to the bank, the bank then uses a laser scanner, which is connected to the

drawee's system, to read the bar code 12 on the check 10. The laser scanner is scanned across the bar code 12 to read the bar code 12. The laser scanner may be either a hand-held scanner or a stationary bar code scanner capable of reading the bar code 12. The information from the bar code 12 is entered into the bank's

5 system and the system determines the account number, the routing number, the amount of the check 10, the date the check 10 was written, and any other information contained in the bar code 12. The information from the bar code 12 is compared to the information on the check 10. If the information on the check 10 matches the information on the barcode 12, the bank then pays the check 10. The

10 barcode scanner used by the bank can be any type of scanner chosen using sound engineering judgement. The operation of the barcode scanner is well known in the art, and, for sake of brevity, will not be further described herein.

The entire system of the preferred embodiment is done automatically. This

15 allows the process to be available to individuals as well as large companies. The inventive process will allow banks, and other financial institutions, to check the authenticity of every check that the bank processes. The checks are received in large quantities and are simply fed into the bar code scanner and each bar code 12 is read by the scanner and the information on the bar code 12 is compared to the

20 information that the bank received from the customer when the check 10 was created. If the information matches, the system simply pays the check. If the information does not match, then the system sends a notice to the customer about the discrepancy. This notification to the customer could take place via any method chosen using sound engineering judgment, but in the preferred embodiment, the

25 bank sends the information to the customer via an on-line banking system.

When the customer views the account on-line, the checks that did not match will be presented to the customer, and the customer can either tell the bank to go ahead and pay the check anyway, or to not pay the check. If the customer tells the

bank not to pay the check, the bank can then proceed with an investigation of the fraudulent check.

The invention also encompasses the drawee simply paying the check 10 5 after the bar code 12 has been scanned, and the corresponding check 10 has been authenticated . In this embodiment, the drawee does not compare the information from the check 10 to the information provided on the bar code 12. The check 10 will be paid according to the information provided on the bar code 12.

10 In another preferred embodiment, the check 10 does not include a barcode 12. A check 10 is written by the drawer, in typical fashion, and then sent out to the payee. When the payee presents the check 10 to the bank, the bank transfers the information from the check 10 into an electronic database, wherefrom the information is transferred via the Internet to a central database. The transfer of the 15 information from the bank's electronic database via the Internet can be done by any means chosen using sound engineering judgment, but preferably the transfer takes place through a modem and data link. The data link allows transfer of the information between the bank's modem and the Internet. The drawer accesses the drawer's account via the Internet, and views the checks 10 that have been presented 20 for payment to the bank. The operation and institution of on-line bank accounts and on-line banking are well known in the art and, for the sake of brevity, will not be further described herein. The drawer then marks off the checks 10 that are authentic, and sends the information to the bank. The bank then pays only the checks 10 that have been authorized by the drawer.

25

In a most preferred embodiment, the entire process is integrated and automated. The inventive process of the most preferred embodiment integrates the process from the writing of the check 10, to the payment of the check 10, to the balancing of the checking account. In the most preferred embodiment, the bank

and the customer utilize the same system. The bank provides a network, or an on-line banking system, for the customer's account, so that when the customer accesses the account, the customer is linked to the bank's system.

- 5 The process begins with the customer writing a check 10. The customer enters the information into a computer to create the check 10. As soon as the information is entered and approved by the customer, the information on the check 10, which includes the payee, the amount of the check 10, the date the check 10 was created, the customer's account number, the bank's routing number, and the
- 10 check number, is in the bank's system, and the bank is then aware that that check has been authorized by the customer. Just as in the previous embodiment, the check 10 is then printed out with a bar code 10 attached to it with the relevant information contained in the bar code 12. The check 10 is then presented to the payee, who scans the check 10 using a bar code scanner to read the bar code 12.
- 15 The information from the bar code 12 is sent directly to the payee's bank for clearing and the payee bank electronically transfers the information to the drawee bank. Since the drawee bank already has the information from the bar code 12 in the bank's system, the drawee bank approves the payment of the check 10, debits the customer's account and the payee bank then credits the payee's account. This
- 20 process is virtually instantaneous, thereby avoiding the sometimes days long delay of payment for the payee or the payee's bank.

- 25 When the drawee bank debits the customer's account, the bank's system is automatically updated and the customer's account reflects the departure of the funds. In the inventive process, the customer's record of the account is also automatically updated to reflect the payment of the check 10. This eliminates the need to balance the checking account at the end of each month. When the customer logs onto the on-line banking system to view the customer's account, the amount of money in the account will always be up to date.

The most preferred embodiment encompasses the bank directly making the payment to the payee instead of creating the check 10. When the customer enters the information for the creation of the check 10, the bank automatically makes a 5 payment to the payee in the authorized amount.

The most preferred embodiment also encompasses the customer and the bank using different systems, where when the check 10 was created, the customer would have to transfer the information from the customer's system to the bank's 10 system, and when the check was paid by the bank, the bank would have to transfer the information from the bank's system to the customer's system.

Another preferred embodiment that relates to the most preferred embodiment includes integrating the entire process at the point of sale as well. 15 In this preferred embodiment, the check 10 is written by hand by the customer. When the customer presents the check 10 to the payee, the payee scans the check 10 using an optical scanner capable of reading the physical writing on the check 10. The information from the check 10 is then sent directly to the payee's bank, which then transfers the information to the drawee bank. The drawee bank would 20 then transfer the information to the customer's account for approval. When the customer logs onto the on-line banking system, the check 10 will be presented for approval. Once the customer's approval has been obtained, the drawee bank then makes the payment to the payee's bank, which in turn makes the payment to the payee.

25

The invention has been described with reference to preferred embodiments. It is to be understood that the references to checks throughout this specification apply equally well to any negotiable instrument, and the references to banks apply equally well to any financial institution. The invention also encompasses the payee

bank and the drawee bank being the same entity. Obviously, modifications and alterations will occur to others upon a reading and understanding of this specification. It is intended to include all such modifications and alternations in so far as they come within the scope of the appended claims or the equivalents
5 thereof.

Having thus described the invention, it is now claimed:

I CLAIM:

1. A method for preventing check fraud, the method comprising the steps of:

5 providing a bank with a bank routing number;

providing a customer having an account with the bank and a corresponding account number;

having the customer electronically create a check containing at least, a payee, an amount, a date, a customer name, and a check number;

10 attaching a bar code on the check using electronic placement means wherein the bar code contains the customer's account number, the bank's routing number and at least one piece of information selected from the group consisting of, the payee, the amount, the date, the customer's name, and the check number;

delivering the check to the bank;

15 scanning the bar code; and,

paying the check only if the information printed on the check is identical to the at least one piece of information on the bar code.

2. An improved negotiable instrument, the negotiable instrument comprising:

an amount box containing an amount of the negotiable instrument;

a signature line for providing the identity of a drawer;

a payee identifier line;

an amount line;

25 a drawee account number;

a drawee routing number; and,

a machine readable code, the machine readable code containing the drawer's account number, the drawee's routing number and one or more pieces of information from the group consisting of the following: a payee, the amount of the

negotiable instrument, a date corresponding to the date the negotiable instrument was created, the identity of the drawer, a memo, and a identifier number corresponding to the negotiable instrument.

5 3. The improved negotiable instrument of claim 2, wherein the improved negotiable instrument is a check.

4. The improved negotiable instrument of claim 2, wherein the improved negotiable instrument further comprises:

10 a date line;
 a identifier number corresponding to the negotiable instrument;
 a name and address line of a drawer; and,
 a memo line.

15 5. The improved negotiable instrument of claim 4, wherein the machine-readable code is a bar code.

6. A method for preventing fraud, the method comprising the steps of:

20 providing a drawee;
 providing a drawer having an account with the drawee and a corresponding account number;
 delivering to the drawee at least one negotiable instrument drawn to the drawer's account;
25 putting the at least one negotiable instrument into an electronic format to be viewed on the Internet;
 viewing the at least one negotiable instrument on the Internet; and,
 having the drawer advise the drawee which of the at least one negotiable instruments to pay.

7. The method of claim 6, wherein putting the at least one negotiable instrument into an electronic format to be viewed on the Internet comprises the steps of:

5 entering the information from the negotiable instrument into an electronic database;

linking the electronic database with the drawer's account; and,

transferring information from the electronic database to the Internet.

10 8. The method of claim 6, wherein viewing the at least one negotiable instrument on the Internet comprises the steps of:

determining if any of the at least one negotiable instruments were created by the drawer; and,

15 electronically marking any of the at least one negotiable instruments that were created by the drawer.

9. The method of claim 8, wherein the method further comprises the step of:

20 paying the at least one negotiable instrument that the drawer has advised the drawee to pay.

10. A method for preventing fraud, the method comprising the steps of:

25 providing a drawer having an account with a corresponding account number;

providing a drawee with a drawee routing number;

providing means for creating a negotiable instrument;

creating at least one negotiable instrument containing at least, a payee, an amount, a date, and a drawee's identity;

providing a machine readable code; and,
attaching the machine readable code on the at least one negotiable
instrument, the machine readable code containing the drawer's account number, the
drawee's routing number and at least one piece of information selected from the
5 group comprising, the payee, the amount, the date, the identity of the drawer, a
memo, and a identifier number corresponding to the at least one negotiable
instrument.

11. The method of claim 10, wherein the method further
10 comprises the steps of the drawee:
receiving the at least one negotiable instrument; and,
scanning the machine-readable code.

12. The method of claim 11, wherein the method further
15 comprises the steps of the drawee:
determining whether information printed on the at least one negotiable
instrument is identical to the at least one piece of information on the machine
readable code; and,
paying the negotiable instrument only if the information on the machine-
20 readable code is identical to the at least one piece of information on the at least one
negotiable instrument.

13. The method of claim 10, wherein after creating at least one
negotiable instrument containing information, the information containing at least, a
25 payee, an amount, a date, and a drawee's identity, the method comprises the steps
of:
transferring the information to the drawee; and,
entering the information into a drawee database.

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14. The method of claim 13, wherein after scanning the machine readable code, the method comprises the step of:

automatically comparing the information on the at least one negotiable instrument to the information in the drawee database.

5

15. The method of claim 12, wherein determining whether information printed on the at least one negotiable instrument is identical to the at least one piece of information on the machine readable code comprises the step of:

notifying the drawer if the information printed on the at least one negotiable
10 instrument is not identical to the at least one piece of information on the machine-
readable code.

16. A device for protecting against fraud, the device for use with
a drawer's account and a drawee having a routing number, the device comprising:

15 means for entering data;
means for creating a negotiable instrument containing at least, a payee, an
amount, a date, and a drawer's identity; and,
means for creating a machine readable code, the machine readable code
containing the drawer's account number, the drawee's routing number and at least
20 one piece of information selected from the group comprising, the payee, the
amount, the date, the identity of the drawer, a memo, and a identifier number
corresponding to the at least one negotiable instrument.

17. The device of claim 16, wherein the device further
25 comprises:

means for scanning the machine-readable code.

18. The device of claim 17, wherein the machine-readable code
is a bar code.

19. The device of claim 17, wherein the device further comprises:

means for scanning the information on the negotiable instrument; and,
5 means for comparing the information from the machine-readable code to the information on the negotiable instrument.

20. A method for integrating the creation and processing of negotiable instruments, the method comprising the steps of:

10 providing a drawer having an account with a corresponding account number;
providing a drawee with a drawee routing number;
creating at least one negotiable instrument containing information that contains at least, a payee, an amount, a date, and a drawee's identity;
15 providing a machine readable code; and,
attaching the machine readable code on the at least one negotiable instrument, the machine readable code containing the drawer's account number, the drawee's routing number and at least one piece of information selected from the group comprising, the payee, the amount, the date, the identity of the drawer, a
20 memo, and a identifier number corresponding to the at least one negotiable instrument.

21. The method of claim 20, wherein creating at least one negotiable instrument containing information that contains at least, a payee, an amount, a date, and a drawee's identity, further comprises the step of:
25 transferring the information to the drawee bank.

22. The method of claim 21, wherein the method further comprises the steps of:

providing a payee;

providing a payee bank;

presenting the at least one negotiable instrument to the payee;

having the payee scan the machine-readable code;

5 having the payee electronically transfer the drawer's account number, the drawee's routing number, and the at least one piece of information to the payee bank;

having the payee bank electronically transfer the drawer's account number, the drawee's routing number, and the at least one piece of information to the 10 drawee bank;

having the drawee bank determine whether the drawer's account number, the drawee's routing number, and the at least one piece of information supplied by the payee bank are identical to the information transferred to the drawee bank; and,

15 having the drawee bank pay the at least one negotiable instrument only if the drawer's account number, the drawee's routing number, and the at least one piece of information supplied by the payee bank are identical to the information transferred to the drawee bank.

23. The method of claim 22, wherein the method further 20 comprises the steps of:

providing an integrated system, wherein the drawee and the drawer's creation of the at least one negotiable instrument are linked, whereby when the at least one negotiable instrument is created, the information is stored in a drawee database;

25 providing means for the drawer to view the drawer's account;

having the drawee bank automatically update the drawer's account to reflect payment of the at least one negotiable instrument, thereby creating an up to date amount in the drawer's account.

ABSTRACT OF THE DISCLOSURE

METHOD AND DEVICE FOR PREVENTING CHECK FRAUD

An inventive check is disclosed including a barcode, which includes at least

5 one of the following pieces of information: the date the check was paid, the amount of the check, the payee, the drawers account number, the banks routing number, and the identifier number of the check. A method for preventing check fraud is also provided, including the steps of attaching a machine readable code on a negotiable instrument, creating a negotiable instrument, the drawee receiving the

10 negotiable instrument, and the drawee scanning the machine readable code. A method is also included for integrating the entire checking process.

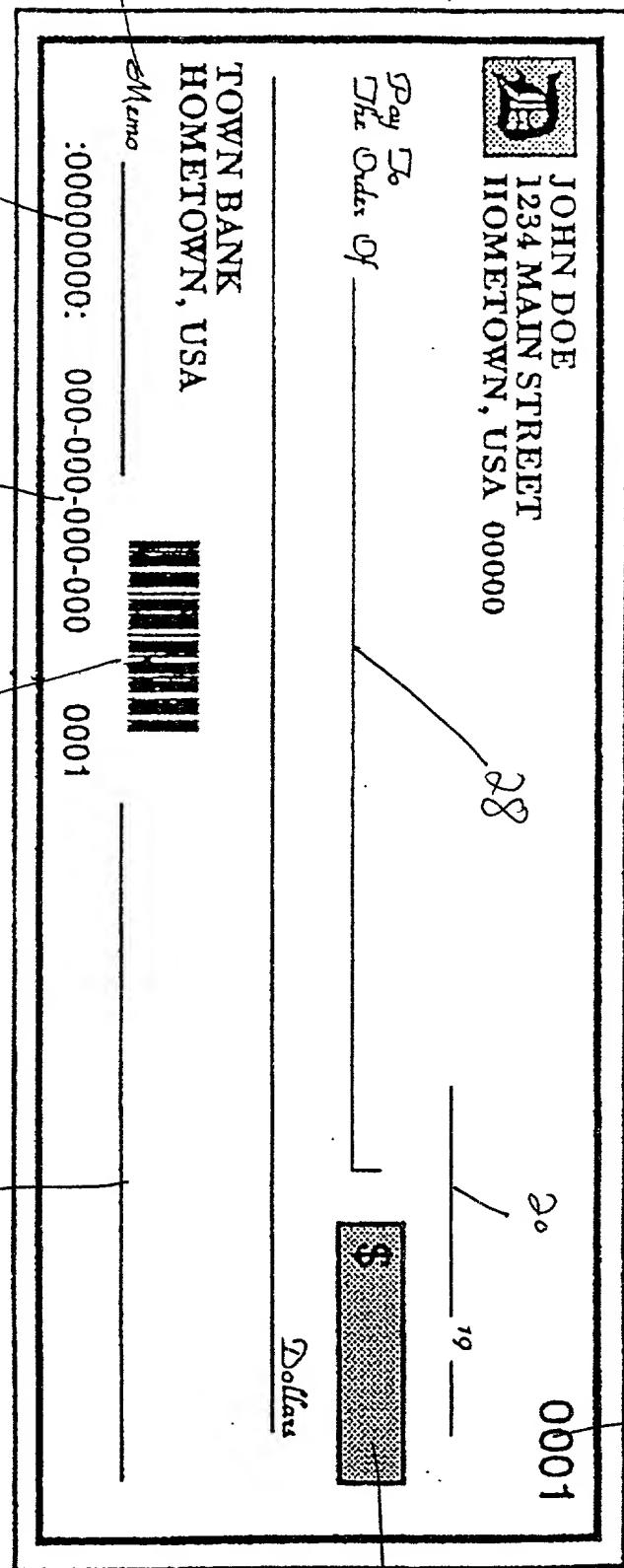


Figure 1

PATENT

Attorney's Docket No. 0236.0006

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COMBINED DECLARATION AND POWER OF ATTORNEY

(ORIGINAL, DESIGN, NATIONAL STAGE OF PCT, SUPPLEMENTAL, DIVISIONAL,
CONTINUATION OR CIP)

=====

As a below named inventor, I hereby declare that:

TYPE OF DECLARATION

This declaration is of the following type: (check one applicable item below)

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national stage of PCT

[NOTE: If one of the following 3 items apply then complete and also attach ADDED PAGES FOR DIVISIONAL, CONTINUATION OR CIP.]

divisional

continuation

continuation-in-part (CIP)

INVENTORSHIP IDENTIFICATION

[WARNING: If the inventors are each not the inventors of all the claims an explanation of the facts, including the ownership of all the claims at the time the last claimed invention was made, should be submitted.]

My residence, post office address and citizenship are as stated below next to my name, I believe I am the original, first and sole inventor or an original, first and joint inventor of the subject matter which is claimed and for which a patent is sought on the invention entitled:

TITLE OF INVENTION

METHOD AND DEVICE FOR PREVENTING CHECK FRAUD

SPECIFICATION IDENTIFICATION

The specification of which: (complete (a), (b) or (c)

(a) X is attached hereto.

(b) _____ was filed on _____ as _____ Serial No. 0 / _____
or _____ Express Mail No., as Serial No. not yet known _____ and was
amended on _____ (if applicable).

(c) _____ was described and claimed in PCT International Application No.
_____ filed on _____ and as amended under PCT Article 19 on
_____ (if any).

[NOTE: Amendments filed after the original papers are deposited with the PTO which contain new matter are not accorded a filing date by being referred to in the declaration. Accordingly, the amendments involved are those filed with the application papers or, in the case of a supplemental declaration, are those amendments claiming matter not encompassed in the original statement of invention or claims. See 37 CFR 1.67.]

ACKNOWLEDGEMENT OF REVIEW OF PAPERS AND DUTY OF CANDOR

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose to the Office all information known to the person to be material to patentability as defined in § 1.56.

_____ In compliance with this duty there is

attached an information disclosure statement, 37 CFR 1.97.

PRIORITY CLAIM

I hereby claim foreign priority benefits under Title 35, United States Code § 119 of any foreign application(s) for patent or inventor's certificate or of any PCT international application(s) designating at least one country other than the United States of America listed below and have also identified below any foreign application(s) for patent or inventor's certificate or any PCT international application(s) designating at least one country other than the United States of America filed by me on the same subject matter having a filing date before that of the application(s) of which priority is claimed.

(complete (d) or (e))

(d) X no such applications have been filed.

(e) ____ such applications have been filed as follows.

[NOTE: Where item (c) is entered above and the International Application which designated the U.S. claimed priority check item (e), enter the details below and make the priority claim.]

EARLIEST FOREIGN APPLICATION(S), IF ANY FILED WITHIN 12 MONTHS (6 MONTHS FOR DESIGN) PRIOR TO THIS U.S. APPLICATION

COUNTRY	APPLICATION No.	DATE OF FILING (day, month, year)	PRIORITY CLAIMED UNDER 37 USC 119

			__ YES __ NO
			__ YES __ NO
			__ YES __ NO
			__ YES __ NO
			__ YES __ NO

**ALL FOREIGN APPLICATION(S), IF ANY FILED MORE THAN 12 MONTHS (6
MONTHS FOR DESIGN) PRIOR TO THIS U.S. APPLICATION**

POWER OF ATTORNEY

As a named inventor, I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith.

Daniel A. Thomson

Reg. No. 43,189

(check the following item, if applicable)

 Attached as part of this declaration and power of

attorney is the authorization of the above-named attorney(s) to accept and follow instructions from my representative(s).

SEND CORRESPONDENCE TO

Daniel A. Thomson

4421 Ranchwood Spur

Akron, OH 44333-1343

DIRECT TELEPHONE CALLS TO:

Daniel A. Thomson

(330) 535-9999

DECLARATION

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

SIGNATURE(S)

Full name of sole or first inventor: David A. Martin

Inventor's signature 

Date 06-29-99 Country of Citizenship: USA

Residence: 35521 Quatermane Circle, Bentleyville, Ohio 44139

Post Office Address: 35521 Quatermane Circle, Bentleyville, Ohio 44139

Full name of second joint inventor, if any:

Inventor's signature _____

Date _____ Country of Citizenship: USA

Residence:

Post Office Address:

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_____ Added pages to combined declaration and power of attorney for divisional, continuation, or continuation-in-part (CIP) application.

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